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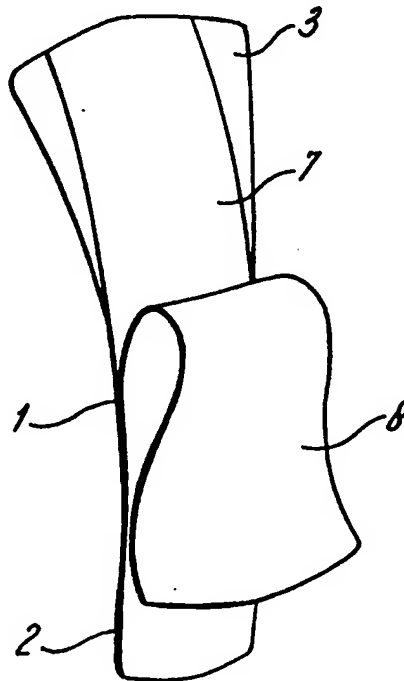
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(54) Title: SANITARY NAPKIN FOR TANGASLIP

(57) Abstract

A panty liner comprises a layer of hygienic material which is formed according to a central part having at two opposite ends in each case an end part, at least one end part of which is widened. The other end part is of approximately the same width as the central part, so that the panty liner is suitable for use in so-called thong briefs. The central part and the other end part can form a strip with parallel longitudinal edges.



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SANITARY NAPKIN FOR TANGASLIP

The invention relates to the field of panty liners. A panty liner is a hygienic product which is worn by women with a discharge. The conventional panty liners all
5 have virtually the same standard shape, with a central area which widens out at both ends.

In general, these products are satisfactory, but in certain cases wearing them gives rise to problems. For instance, it is not readily possible to wear the known panty liners combined with so-called thong briefs. Thong briefs are of very low
10 width, with the result that the panty liner projects at the sides, which is uncomfortable.

The object of the invention is therefore to provide a panty liner which is better suited for combining with thong briefs. That object is achieved by means of a panty liner comprising a layer of hygienic material which is formed according to a central
15 part having at two opposite ends in each case an end part, at least one end part of which is widened, while the other end part is of approximately the same width as the central part.

The panty liner according to the invention is worn with the widened part facing forward. The now narrower rear end is better suited to the dimensions of the
20 thong briefs at the position of the crotch, so that wearing of the party liner is considerably more comfortable.

The panty liner can be designed in various ways within the limits described above. However, an embodiment in which the central part and said other end part form a strip with parallel longitudinal edges is preferred. The mutual length
25 dimensions of the strip and the widened end part can vary; the strip can even be of about the same length as the widened end part.

Moreover, the widened end part can be bounded by straight longitudinal edges which diverge from the central part.

As in the case of the known panty liners, a band of adhesive can extend over
30 both end parts and the central part, which band is covered by a removable film. The band of adhesive and the film can be of the same width as the strip formed by the central part and the other end part.

An exemplary embodiment of the panty liner according to the invention will be described in greater detail below with reference to the figures.

Figure 1 shows a panty liner according to the invention in perspective, with partially removed film.

5 Figure 2 shows a top view.

Figure 3 shows a person with thong briefs.

Figure 4 shows a view of the top side of the thong briefs, with the panty liner.

The panty liner shown in Figures 1 and 2 comprises a central part 1, and an end part 2 which is of approximately the same width. There is also an end part 3
10 which is widened relative to the central part 1 and the end part 2. The central part 1 and the end part 2 of approximately the same width form a strip 4, the longitudinal edges 5 of which run approximately parallel. The widened end part is likewise bounded by straight edges 6 which diverge.

As shown in Figure 1, a band of adhesive material 7, on which a film 8 is
15 removably provided, can be fitted. The film 8 is of exactly the same shape as the panty liner, in such a way that the latter is fully covered.

In use, the panty liner is worn as shown with reference to Figures 3 and 4. The thong briefs 9 shown there are shown partially in top view in Figure 4. The front side of the thong briefs is indicated by reference number 10, the rear side by 11.

20 The widened part 3 of the panty liner is worn at the front side of the thong briefs 10. The strip 4, which comprises the central part 1 and the end part 2, is of approximately the same width as the crotch part 12 of the thong briefs 9, in such a way that the panty liner does not project, and wearing it is comfortable.

The following measurements are mentioned as a non-limiting example. The
25 central part 1 and the end part can be 25 mm to 30 mm wide; the widened end part 3 can be 45 mm to 52 mm wide.

Claims

1. Panty liner, comprising a layer of hygienic material which is formed according to a central part (1) having at two opposite ends in each case an end part (2, 3), at
5 least one end part (3) of which is widened, characterized in that the other end part (2) is of approximately the same width as the central part (1).
2. Panty liner according to Claim 1, in which the central part (1) and said other end part (2) form a strip (4) with parallel longitudinal edges (5).
3. Panty liner according to Claim 1 or 2, in which the widened end part (3) is
10 bounded by straight longitudinal edges (6) which diverge from the central part (1).
4. Panty liner according to Claim 1, 2 or 3, in which a band of adhesive (7) extends over both end parts (2, 3) and the central part (1), which band is covered by a removable film (8).
5. Panty liner according to Claims 2 and 4, in which the band of adhesive (7) and
15 the film (8) are of at least the same width as the strip (4) formed by the central part (1) and the other end part (2).
6. Panty liner according to one of the preceding claims, in which the width of the widened end part (3) lies between 45 and 55 mm.
7. Panty liner according to one of the preceding claims, in which the width of the
20 central part (1) lies between 25 and 30 mm.

fig-1^{1/2}

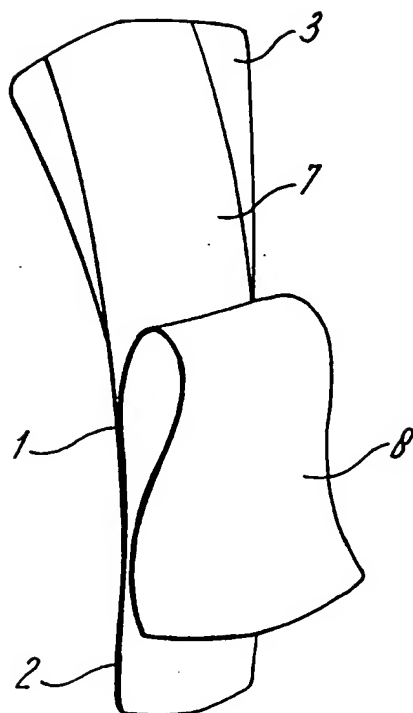


fig-2

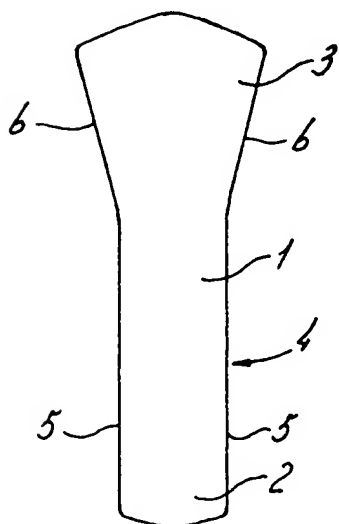


fig-3^{2/2}

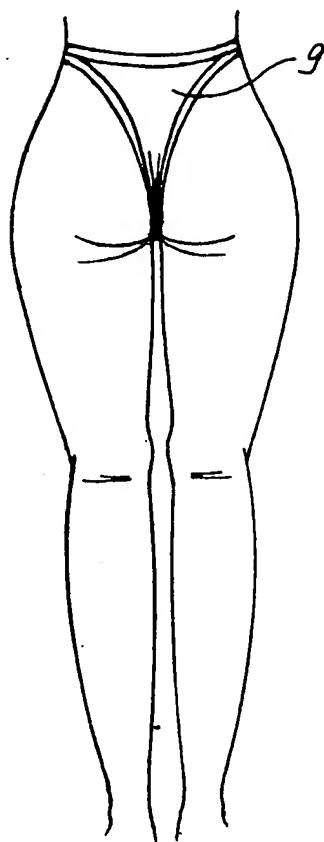
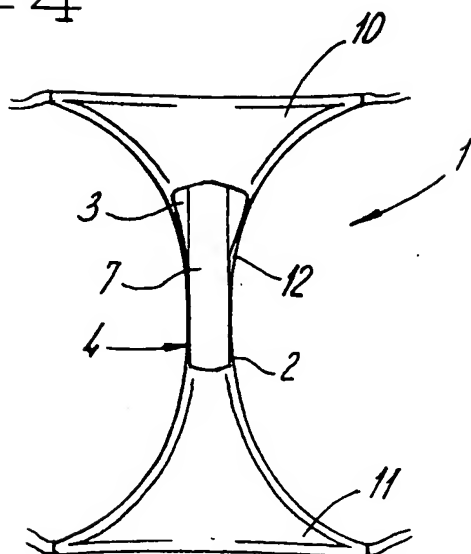


fig-4



INTERNATIONAL SEARCH REPORT

International Application No
PCT/NL 98/00275

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 A61F13/15

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 6 A61F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	FR 2 694 187 A (COUEPEL SYLVIE) 4 February 1994 see the whole document ---	1-7
X	US 3 441 025 A (RALPH HAROLD J) 29 April 1969 see column 2, line 33 - column 4, line 37; figures ---	1-3
X	DE 87 05 429 U (WIEDEMEYER) 27 May 1987 see the whole document ---	1,2,4-7
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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
FR 2694187 A	04-02-1994	NONE	
US 3441025 A	29-04-1969	US RE28483 E	15-07-1975
DE 8705429 U	27-05-1987	NONE	
US 5127911 A	07-07-1992	NONE	
US 5383868 A	24-01-1995	NONE	